



Clinical trial results:

A trial comparing the effect and safety of insulin degludec versus insulin detemir, both in combination with insulin aspart, in the treatment of pregnant women with type 1 diabetes.

Summary

| | |
|--------------------------|-------------------------|
| EudraCT number | 2017-000048-17 |
| Trial protocol | DK GB AT IE GR ES HR IT |
| Global end of trial date | 17 December 2020 |

Results information

| | |
|--------------------------------|------------------|
| Result version number | v1 (current) |
| This version publication date | 25 December 2021 |
| First version publication date | 25 December 2021 |

Trial information

Trial identification

| | |
|-----------------------|-------------|
| Sponsor protocol code | NN1250-4300 |
|-----------------------|-------------|

Additional study identifiers

| | |
|------------------------------------|-----------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT03377699 |
| WHO universal trial number (UTN) | U1111-1191-3018 |

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | Novo Nordisk A/S |
| Sponsor organisation address | Novo Allé, Bagsvaerd, Denmark, 2880 |
| Public contact | Clinical Transparency Anchor and Disclosure (1452), Novo Nordisk A/S, clinicaltrials@novonordisk.com |
| Scientific contact | Clinical Transparency Anchor and Disclosure (1452), Novo Nordisk A/S, clinicaltrials@novonordisk.com |

Notes:

Paediatric regulatory details

| | |
|--|----|
| Is trial part of an agreed paediatric investigation plan (PIP) | No |
| Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial? | No |
| Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial? | No |

Notes:

Results analysis stage

| | |
|--|------------------|
| Analysis stage | Final |
| Date of interim/final analysis | 31 May 2021 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 17 December 2020 |
| Global end of trial reached? | Yes |
| Global end of trial date | 17 December 2020 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To compare the effect on glycaemic control of insulin degludec once daily plus insulin aspart 2-4 times daily with meals and insulin detemir once daily or twice daily plus insulin aspart 2-4 times daily with meals in a population of pregnant women with type 1 diabetes mellitus.

Protection of trial subjects:

The trial was conducted in accordance with the Declaration of Helsinki (Last amended by the 64th World Medical Association General Assembly, Fortaleza, Brazil. October 2013) and International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) Good Clinical Practice, including archiving of essential documents (Nov 2016) and 21 Code of Federal Regulations (CFR) 312.120.

Background therapy:

Not applicable

Evidence for comparator:

Not applicable

| | |
|---|------------------|
| Actual start date of recruitment | 22 November 2017 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | Yes |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|------------------------|
| Country: Number of subjects enrolled | Argentina: 7 |
| Country: Number of subjects enrolled | Australia: 11 |
| Country: Number of subjects enrolled | Austria: 4 |
| Country: Number of subjects enrolled | Brazil: 31 |
| Country: Number of subjects enrolled | Canada: 18 |
| Country: Number of subjects enrolled | Denmark: 12 |
| Country: Number of subjects enrolled | United Kingdom: 16 |
| Country: Number of subjects enrolled | Greece: 8 |
| Country: Number of subjects enrolled | Croatia: 4 |
| Country: Number of subjects enrolled | Ireland: 6 |
| Country: Number of subjects enrolled | Israel: 10 |
| Country: Number of subjects enrolled | Italy: 17 |
| Country: Number of subjects enrolled | Russian Federation: 67 |
| Country: Number of subjects enrolled | Serbia: 14 |
| Worldwide total number of subjects | 225 |
| EEA total number of subjects | 51 |

Notes:

| Subjects enrolled per age group | |
|---|-----|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 0 |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 225 |
| From 65 to 84 years | 0 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

The trial was conducted at 56 sites in 14 countries as follows (number of sites that screened subjects/ number of sites that randomised subjects): Argentina (5/4); Australia (7/7); Austria (3/3); Brazil (6/6); Canada (6/5); Croatia (1/1); Denmark (2/2); Greece (3/3); Ireland (3/2); Israel (2/2); Italy (5/5); Russia (8/8); Serbia (2/2) and UK (8/6).

Pre-assignment

Screening details:

Based on subject pregnancy status, either non-pregnant with the intention to become pregnant or pregnant from gestational Week (GW) 8-13 + 6 days were randomised in a 1:1 ratio to receive either Insulin Degludec (IDeg) or Insulin Detemir (IDet) in combination with Insulin Aspart (IAsp) as subcutaneous injection.

Period 1

| | |
|------------------------------|---------------------------------|
| Period 1 title | Overall period (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Randomised - controlled |
| Blinding used | Not blinded |

Arms

| | |
|------------------------------|------|
| Are arms mutually exclusive? | Yes |
| Arm title | IDeg |

Arm description:

Subjects were to receive IDeg once daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection using FlexTouch and FlexPen pen injectors respectively. After randomization, the IDeg doses were adjusted once weekly to reach the glycaemic target of 4.0 – 5.0 millimoles per liter (mmol/L). It was based on mean of 3 pre-breakfast self-measured plasma glucose (SMPG) values measured on 2 days prior to visit and on the day of the visit. If one of the SMPG values was below target of 4.0 mmol/L, the insulin dose was reduced: (less than) <3.1: -4 units (U) and 3.1 – 3.9: -2U. If the mean was: 4.0-5.0: no adjustment; 5.1 – 10.0: +2U, 10.1 – 15.0: +4U and (greater than) >15.0: +6U. On the other hand, for pregnant women, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized at investigator's discretion based on the subject's SMPG values with target value (less than or equal to) ≤ 7.8 mmol/L.

| | |
|--|--|
| Arm type | Experimental |
| Investigational medicinal product name | Insulin Degludec |
| Investigational medicinal product code | |
| Other name | Tresiba® |
| Pharmaceutical forms | Solution for injection in pre-filled pen |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Subjects were to receive IDeg once daily with meals as subcutaneous injection using FlexTouch pen injector. After randomization, the IDeg doses were adjusted once weekly to reach the glycaemic target of 4.0 – 5.0 mmol/L. It was based on mean of 3 pre-breakfast SMPG values measured on 2 days prior to visit and on the day of the visit. If one of the SMPG values was below target of 4.0 mmol/L, the insulin dose was reduced: (less than) <3.1 mmol/L: -4 units (U) and 3.1 – 3.9 mmol/L: -2U. If the mean was: 4.0-5.0 mmol/L: no adjustment; 5.1 – 10.0 mmol/L: +2U, 10.1 – 15.0 mmol/L: +4U and (greater than) >15.0 mmol/L: +6U.

| | |
|--|--|
| Investigational medicinal product name | IAsp |
| Investigational medicinal product code | |
| Other name | NovoRapid® |
| Pharmaceutical forms | Solution for injection in pre-filled pen |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Subjects were to receive IAsp, 2-4 times daily with meals as subcutaneous injection using FlexPen pen injector. After randomization, the IAsp dose adjustments were at investigator's discretion based on the

subject's SMPG values. For pregnant women, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized with target SMPG value ≤ 7.8 mmol/L.

| | |
|---|--|
| Arm title | IDet |
| Arm description: | |
| Subjects were to receive IDet once or twice daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection using FlexPen pen injector. The dose adjustments were made with a glycaemic target of 4.0 – 5.0 mmol/L. Dose adjustments: for IDet once daily - based on mean of 3 pre-breakfast SMPG values; for IDet twice daily - morning doses - based on mean pre-main evening meal SMPG values whereas the evening doses - based on mean pre-breakfast SMPG values. If one of the pre-main evening meal SMPG values were below target of 4.0 mmol/L, the insulin dose was reduced: <3.1 mmol/L: -4U and 3.1 – 3.9 mmol/L: -2U. If the mean was: 4.0-5.0 mmol/L- no adjustment; 5.1 – 10.0 mmol/L: +2U, 10.1 – 15.0 mmol/L: +4U and >15.0 mmol/L: +6U. For pregnant, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized at investigator's discretion based on the subject's SMPG values with target value ≤ 7.8 mmol/L. | |
| Arm type | Active comparator |
| Investigational medicinal product name | IDet |
| Investigational medicinal product code | |
| Other name | Levemir® |
| Pharmaceutical forms | Solution for injection in pre-filled pen |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Subjects received IDet once or twice daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection. Dose adjustments were made with glycaemic target of 4.0–5.0 mmol/L. Dose adjustments: for IDet once daily - based on mean of 3 pre-breakfast SMPG values; for IDet twice daily - morning doses - based on mean pre-main evening meal SMPG values whereas the evening doses - based on mean pre-breakfast SMPG values. If one of the pre-main evening meal SMPG values were below target of 4.0 mmol/L, the insulin dose was reduced: <3.1: -4U and 3.1 – 3.9: -2U. If the mean was: 4.0-5.0 mmol/L- no adjustment; 5.1 – 10.: +2U, 10.1 – 15.0: +4U and >15.0: +6U.

| | |
|--|--|
| Investigational medicinal product name | IAsp |
| Investigational medicinal product code | |
| Other name | NovoRapid® |
| Pharmaceutical forms | Solution for injection in pre-filled pen |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Subjects were to receive IAsp, 2-4 times daily with meals as subcutaneous injection using FlexPen pen injector. After randomization, the IAsp dose adjustments were at investigator's discretion based on the subject's SMPG values. For pregnant women, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized with target SMPG value ≤ 7.8 mmol/L.

| Number of subjects in period 1 | IDeg | IDet |
|---------------------------------------|------|------|
| Started | 111 | 114 |
| Completed | 89 | 89 |
| Not completed | 22 | 25 |
| Consent withdrawn by subject | 2 | 9 |
| Unclassified | 19 | 15 |
| Lost to follow-up | 1 | 1 |

Baseline characteristics

Reporting groups

| | |
|-----------------------|------|
| Reporting group title | IDeg |
|-----------------------|------|

Reporting group description:

Subjects were to receive IDeg once daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection using FlexTouch and FlexPen pen injectors respectively. After randomization, the IDeg doses were adjusted once weekly to reach the glycaemic target of 4.0 – 5.0 millimoles per liter (mmol/L). It was based on mean of 3 pre-breakfast self-measured plasma glucose (SMPG) values measured on 2 days prior to visit and on the day of the visit. If one of the SMPG values was below target of 4.0 mmol/L, the insulin dose was reduced: (less than) <3.1: -4 units (U) and 3.1 – 3.9: -2U. If the mean was: 4.0-5.0: no adjustment; 5.1 – 10.0: +2U, 10.1 – 15.0: +4U and (greater than) >15.0: +6U. On the other hand, for pregnant women, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized at investigator's discretion based on the subject's SMPG values with target value (less than or equal to) ≤ 7.8 mmol/L.

| | |
|-----------------------|------|
| Reporting group title | IDet |
|-----------------------|------|

Reporting group description:

Subjects were to receive IDet once or twice daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection using FlexPen pen injector. The dose adjustments were made with a glycaemic target of 4.0 – 5.0 mmol/L. Dose adjustments: for IDet once daily - based on mean of 3 pre-breakfast SMPG values; for IDet twice daily - morning doses - based on mean pre-main evening meal SMPG values whereas the evening doses - based on mean pre-breakfast SMPG values. If one of the pre-main evening meal SMPG values were below target of 4.0 mmol/L, the insulin dose was reduced: <3.1 mmol/L: -4U and 3.1 – 3.9 mmol/L: -2U. If the mean was: 4.0-5.0 mmol/L- no adjustment; 5.1 – 10.0 mmol/L: +2U, 10.1 – 15.0 mmol/L: +4U and >15.0 mmol/L: +6U. For pregnant, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized at investigator's discretion based on the subject's SMPG values with target value ≤ 7.8 mmol/L.

| Reporting group values | IDeg | IDet | Total |
|------------------------|------------|------------|-------|
| Number of subjects | 111 | 114 | 225 |
| Age Categorical | | | |
| Units: Subjects | | | |
| Adults (18-64 years) | 111 | 114 | 225 |
| Age Continuous | | | |
| Units: years | | | |
| arithmetic mean | 31.2 | 31.1 | |
| standard deviation | ± 5.20 | ± 5.28 | - |
| Gender Categorical | | | |
| Units: Subjects | | | |
| Female | 111 | 114 | 225 |

End points

End points reporting groups

| | |
|-----------------------|------|
| Reporting group title | IDeg |
|-----------------------|------|

Reporting group description:

Subjects were to receive IDeg once daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection using FlexTouch and FlexPen pen injectors respectively. After randomization, the IDeg doses were adjusted once weekly to reach the glycaemic target of 4.0 – 5.0 millimoles per liter (mmol/L). It was based on mean of 3 pre-breakfast self-measured plasma glucose (SMPG) values measured on 2 days prior to visit and on the day of the visit. If one of the SMPG values was below target of 4.0 mmol/L, the insulin dose was reduced: (less than) <3.1: -4 units (U) and 3.1 – 3.9: -2U. If the mean was: 4.0-5.0: no adjustment; 5.1 – 10.0: +2U, 10.1 – 15.0: +4U and (greater than) >15.0: +6U. On the other hand, for pregnant women, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized at investigator's discretion based on the subject's SMPG values with target value (less than or equal to) ≤ 7.8 mmol/L.

| | |
|-----------------------|------|
| Reporting group title | IDet |
|-----------------------|------|

Reporting group description:

Subjects were to receive IDet once or twice daily in combination with IAsp 2-4 times daily with meals as subcutaneous injection using FlexPen pen injector. The dose adjustments were made with a glycaemic target of 4.0 – 5.0 mmol/L. Dose adjustments: for IDet once daily - based on mean of 3 pre-breakfast SMPG values; for IDet twice daily - morning doses - based on mean pre-main evening meal SMPG values whereas the evening doses - based on mean pre-breakfast SMPG values. If one of the pre-main evening meal SMPG values were below target of 4.0 mmol/L, the insulin dose was reduced: <3.1 mmol/L: -4U and 3.1 – 3.9 mmol/L: -2U. If the mean was: 4.0-5.0 mmol/L- no adjustment; 5.1 – 10.0 mmol/L: +2U, 10.1 – 15.0 mmol/L: +4U and >15.0 mmol/L: +6U. For pregnant, the SMPG was measured 60 minutes after main meal and the IAsp doses were optimized at investigator's discretion based on the subject's SMPG values with target value ≤ 7.8 mmol/L.

Primary: Last planned glycosylated haemoglobin (HbA1c) prior to delivery

| | |
|-----------------|---|
| End point title | Last planned glycosylated haemoglobin (HbA1c) prior to delivery |
|-----------------|---|

End point description:

Mean of HbA1c at last planned visit prior to delivery after GW16 is presented. The endpoint was evaluated based on the data from both in-trial and on-treatment observation periods. In-trial observation period starts at randomization and ends at the date of trial completion. The date of trial completion is the date of the final scheduled follow-up visit V92 (delivery + 58 days). For subjects not attending the follow-up visit V92, the date of trial completion is the date of the last subject-investigator contact. On-treatment observation period starts at the date of first dose of trial product and ended at the date of the last day on trial product. Full analysis set for pregnant women (FASpregnant) included all randomised women who were pregnant during the trial. In the report data, Number of Subjects Analysed = number of subjects who contributed to the analysis and 'n' is number subjects assessed during in-trial and on-treatment observation periods.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

After gestational week 16

| End point values | IDeg | IDet | | |
|---------------------------------------|--------------------|--------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 84 | 84 | | |
| Units: Percentage point of HbA1c | | | | |
| arithmetic mean (standard deviation) | | | | |
| In-trial n = 84 (IDeg), 84 (IDet) | 6.30 (\pm 0.70) | 6.26 (\pm 0.73) | | |
| On-treatment n = 83 (IDeg), 80 (IDet) | 6.32 (\pm 0.69) | 6.26 (\pm 0.71) | | |

Statistical analyses

| | |
|--|--------------------------------|
| Statistical analysis title | IDeg vs IDet |
| Statistical analysis description: | |
| Primary Estimand. Imputation of missing data was done within two groups of participants defined by randomised treatment arm based on a multiple imputation approach (x1000). For each of the 1000 imputed datasets last planned HbA1c prior to delivery after GW 16 was analysed using an ANCOVA with treatment, region and the stratification factor as categorical fixed effects and a pregnancy status at randomisation-by-baseline HbA1c interaction. | |
| Comparison groups | IDeg v IDet |
| Number of subjects included in analysis | 168 |
| Analysis specification | Pre-specified |
| Analysis type | non-inferiority ^[1] |
| P-value | < 0.0001 |
| Method | ANCOVA |
| Parameter estimate | Mean treatment difference |
| Point estimate | -0.11 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -0.31 |
| upper limit | 0.08 |

Notes:

[1] - The upper limit of the 95% CI for the estimated mean treatment difference in HbA1c was below the prespecified non-inferiority margin of 0.4%.

| | |
|--|----------------------------|
| Statistical analysis title | IDeg vs IDet |
| Statistical analysis description: | |
| Secondary Estimand. Imputation of missing data was done within two groups of subjects defined by randomised treatment arm based on a multiple imputation approach (x1000). The imputation model included region and the stratification factor as categorical fixed effects, and a pregnancy status at randomisation-by-baseline HbA1c interaction. For each of the 1000 imputed datasets last planned HbA1c prior to delivery after GW 16 was analysed using an ANCOVA. | |
| Comparison groups | IDeg v IDet |
| Number of subjects included in analysis | 168 |
| Analysis specification | Pre-specified |
| Analysis type | equivalence ^[2] |
| P-value | = 0.3881 |
| Method | ANCOVA |
| Parameter estimate | Mean treatment difference |
| Point estimate | -0.08 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -0.27 |
| upper limit | 0.11 |

Notes:

[2] - The upper limit of the 95% CI for the estimated mean treatment difference in HbA1c was below the prespecified non-inferiority margin of 0.4%.

Secondary: HbA1c \leq 6.0% (42 millimoles per mole (mmol/mol)) from last planned HbA1c prior to delivery (yes/no)

| | |
|-----------------|--|
| End point title | HbA1c \leq 6.0% (42 millimoles per mole (mmol/mol)) from last planned HbA1c prior to delivery (yes/no) |
|-----------------|--|

End point description:

Number of subjects who achieved pre-defined HbA1c targets \leq 6.0% during the in-trial pregnancy period is presented. In the reported data, 'Yes' infers number of subjects who have achieved \leq 6.0% HbA1c whereas 'No' infers number of subjects who have not achieved \leq 6.0% HbA1c. The endpoint was evaluated based on the data from in-trial observation period. In-trial observation period: from randomization to date of trial completion. The date of trial completion is the date of the final scheduled follow-up visit V92 (delivery + 58 days). For subjects not attending the follow-up visit V92, the date of trial completion is the date of the last subject-investigator contact. FASpregnant included all randomised women who were pregnant during the trial. In the report data, Number of Subjects Analysed = number of subjects who contributed to the analysis.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

After gestational week 16

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 84 | 84 | | |
| Units: Subjects | | | | |
| Yes | 36 | 31 | | |
| No | 48 | 53 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Last planned average post-prandial glucose prior to delivery. Average of three main meals

| | |
|-----------------|---|
| End point title | Last planned average post-prandial glucose prior to delivery. Average of three main meals |
|-----------------|---|

End point description:

Mean of last planned average post-prandial glucose (PPG) prior to delivery after GW 16 is presented. Average PPG is defined as the average of the available blood glucose (BG) measurements 90 minutes after breakfast, lunch and main evening meal respectively. The endpoint was evaluated based on the data from in-trial and on-treatment observation periods. The in-trial observation period starts at randomization and ends at the date of trial completion. The date of trial completion is the date of the final scheduled follow-up visit V92. For subjects not attending the follow-up visit V92, the date of trial completion is the date of the last subject-investigator contact. On-treatment observation period starts at the date of first dose of trial product and ended at the date of the last day on trial product. FASpregnant included all randomised women who were pregnant during the trial. In the report data, Number of Subjects Analysed = number of subjects who contributed to the analysis.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

After gestational week 16

| End point values | IDeg | IDet | | |
|--------------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 82 | 83 | | |
| Units: mmol/L | | | | |
| arithmetic mean (standard deviation) | | | | |
| in-trial | 7.37 (± 1.35) | 6.96 (± 1.63) | | |
| on-treatment | 7.37 (± 1.35) | 6.96 (± 1.64) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Last planned fasting plasma glucose prior to delivery

| | |
|-----------------|---|
| End point title | Last planned fasting plasma glucose prior to delivery |
|-----------------|---|

End point description:

Mean of last planned fasting plasma glucose (FPG) prior to delivery after GW 16 is presented. The endpoint was evaluated based on the data from in-trial and on-treatment observation periods. The in-trial observation period starts at randomization and ends at the date of trial completion. The date of trial completion is the date of the final scheduled follow-up visit V92 (delivery + 58 days). For subjects not attending the follow-up visit V92, the date of trial completion is the date of the last subject-investigator contact. On-treatment observation period starts at the date of first dose of trial product and ended at the date of the last day on trial product. FASpregnant included all randomised women who were pregnant during the trial. In the report data, Number of Subjects Analysed = number of subjects who contributed to the analysis.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

After gestational week 16

| End point values | IDeg | IDet | | |
|--------------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 82 | 83 | | |
| Units: mmol/L | | | | |
| arithmetic mean (standard deviation) | | | | |
| in-trial | 6.17 (± 2.05) | 6.79 (± 2.47) | | |
| on-treatment | 6.19 (± 2.06) | 6.78 (± 2.48) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of hypoglycaemic episodes

| | |
|---|----------------------------------|
| End point title | Number of hypoglycaemic episodes |
| End point description: | |
| Hypoglycaemic episode (plasma glucose \leq 3.9 mmol/L (70 mg/dL) Or $>$ 3.9 mmol/L (70 mg/dL) occurring in conjunction with hypoglycaemic symptoms) is defined as treatment emergent if the onset of the episode occurs on or after the first day of trial product administration, and no later than 7 days from the last day on trial product. Number of treatment emergent hypoglycaemic episodes during the pregnancy period is presented. The endpoint was evaluated based on the data from pregnancy period. Pregnancy period started from first day of pregnancy (date of conception corresponding to the first day in GW 2) or randomisation (whichever comes last) to the date of delivery. Safety analysis set for pregnant women (SASpregnant) included all randomised women exposed to at least one dose of trial product and who are pregnant during the trial. | |
| End point type | Secondary |
| End point timeframe: | |
| During the pregnancy period (from first day of pregnancy (date of conception) or randomisation (whichever comes last) to delivery) | |

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 91 | 94 | | |
| Units: Episodes | | | | |
| number (not applicable) | 5431 | 5982 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Development of sight-threatening retinopathy defined as proliferative retinopathy or maculopathy (yes/no)

| | |
|--|---|
| End point title | Development of sight-threatening retinopathy defined as proliferative retinopathy or maculopathy (yes/no) |
| End point description: | |
| Sight-threatening retinopathy is defined as proliferative retinopathy or maculopathy. Eye examination was performed by fundus photography or pharmacologically dilated fundoscopy to identify if pregnant subjects have developed sight-threatening retinopathy. Number of subjects who developed sight-threatening retinopathy from treatment baseline as well as from pregnancy baseline to the end of treatment (EOT) visit is presented. In the reported data, 'Yes' infers number of subjects who developed sight-threatening retinopathy whereas 'No' infers number of subjects who have not developed sight-threatening retinopathy. For subjects randomised pregnant the pregnancy baseline is same as treatment baseline. For subjects randomised nonpregnant and becoming pregnant in the conception period of trial, pregnancy baseline corresponds to data from visit 55 (week 53+30 days). SASpregnant included all randomised women exposed to at least one dose of trial product and who are pregnant during the trial. | |
| End point type | Secondary |
| End point timeframe: | |
| From treatment baseline as well as from pregnancy baseline to the end of treatment visit | |

| End point values | IDeg | IDet | | |
|--|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 91 | 94 | | |
| Units: Subjects | | | | |
| From treatment baseline to EOT: Left eye: Yes | 2 | 2 | | |
| From treatment baseline to EOT: Left eye: No | 79 | 79 | | |
| From treatment baseline to EOT: Left eye: Missing | 10 | 13 | | |
| From treatment baseline to EOT: Right eye: Yes | 2 | 2 | | |
| From treatment baseline to EOT: Right eye: No | 79 | 79 | | |
| From treatment baseline to EOT: Right eye: Missing | 10 | 13 | | |
| From pregnancy baseline to EOT: Left eye: Yes | 2 | 2 | | |
| From pregnancy baseline to EOT: Left eye: No | 79 | 79 | | |
| From pregnancy baseline to EOT: Left eye: Missing | 10 | 13 | | |
| From pregnancy baseline to EOT: Right eye: Yes | 2 | 2 | | |
| From pregnancy baseline to EOT: Right eye: No | 79 | 79 | | |
| From pregnancy baseline to EOT: Right eye: Missing | 10 | 13 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of adverse events during the pregnancy period

| | |
|-----------------|--|
| End point title | Number of adverse events during the pregnancy period |
|-----------------|--|

End point description:

Number of adverse events (AEs) during pregnancy period is reported. An AE was defined as any unfavourable and unintended sign (including an abnormal laboratory finding), symptom or disease temporally associated with the use of a product, whether or not considered related to the product. All AEs presented are treatment-emergent AEs (TEAEs). The TEAE is defined as an event that has onset date on or after the first day of exposure to randomised treatment and no later than 7 days after the last day of randomised treatment. SASpregnant included all randomised women exposed to at least one dose of trial product and who are pregnant during the trial.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

From first day of pregnancy (date of conception) or randomisation (whichever comes last) to delivery

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 91 | 94 | | |
| Units: Events | | | | |
| number (not applicable) | 429 | 328 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Pre-eclampsia defined as new-onset hypertension and simultaneous proteinuria or presence of eclampsia, haemolysis, elevated liver enzymes, low platelet count (HELLP) syndrome, or other severe organ involvement (yes/no)

| | |
|-----------------|--|
| End point title | Pre-eclampsia defined as new-onset hypertension and simultaneous proteinuria or presence of eclampsia, haemolysis, elevated liver enzymes, low platelet count (HELLP) syndrome, or other severe organ involvement (yes/no) |
|-----------------|--|

End point description:

Number of subjects with one or more events of pre-eclampsia during pregnancy period is reported. Pre-eclampsia was defined as new-onset hypertension (BP greater than or equal to (\geq) 140 mmHg systolic or \geq 90 mmHg diastolic, based on at least 2 measurements taken at least 4 hours apart) occurring from GW 20 to delivery and simultaneous proteinuria (defined as \geq 300 mg protein in a 24 hours urine sample, a protein-to-creatinine ratio of \geq 300 mg/g in a urine sample or a urine dipstick protein of 1+) or presence of eclampsia, HELLP syndrome, or other severe organ involvement. In the reported data, 'Yes' infers number of subjects who had pre-eclampsia events whereas 'No' infers number of subjects who have not had pre-eclampsia events. SASpregnant included all randomised women exposed to at least one dose of trial product and who are pregnant during the trial.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

occurring from gestational week 20 to delivery

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 91 | 94 | | |
| Units: Subjects | | | | |
| Yes | 12 | 7 | | |
| No | 79 | 87 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Birth weight in gram (g)

| | |
|-----------------|--------------------------|
| End point title | Birth weight in gram (g) |
|-----------------|--------------------------|

End point description:

Mean birth weight for live birth infants is presented. The endpoint was evaluated based on the data from in-trial observation period which started at randomization and ended at the date of trial completion. The

date of trial completion was the date of the final scheduled follow-up visit (delivery + 58 days). For subjects who had not attended the follow-up visit, the date of trial completion was the date of the last subject-investigator contact. FASpregnant included all randomised women who were pregnant during the trial. In the report data, Number of Subjects Analysed = number of subjects who contributed to the analysis.

| | |
|----------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| At birth | |

| End point values | IDeg | IDet | | |
|--------------------------------------|------------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 86 | 84 | | |
| Units: gram | | | | |
| arithmetic mean (standard deviation) | 3691.0 (\pm 628.01) | 3490.2 (\pm 629.94) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Pre-term delivery (delivery < 37 completed gestational weeks) (yes/no)

| | |
|-----------------|--|
| End point title | Pre-term delivery (delivery < 37 completed gestational weeks) (yes/no) |
|-----------------|--|

End point description:

Number of pregnant women who had pre-term delivery is presented. Pre-term delivery refers to delivery in less than 37 completed gestational weeks. In reported data, 'Yes' infers number of subjects who had pre-term delivery whereas 'No' infers number of subjects who has not had pre-term delivery. Unaddressed category refers to cases where either parents of infant had not given consent to share information after delivery or subjects who were withdrawn from trial and they did not give any further information or if subjects did not fill pregnancy outcome form. Endpoint was evaluated based on data from in-trial observation period which started at randomisation and ended at date of trial completion. Date of trial completion was date of final scheduled follow-up visit (delivery + 58 days). For subjects who had not attended follow-up visit, date of trial completion was date of last subject-investigator contact. FASpregnant included all randomised women who were pregnant during the trial.

| | |
|----------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| At birth | |

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 92 | 96 | | |
| Units: Subjects | | | | |
| Yes | 34 | 26 | | |
| No | 57 | 66 | | |
| Unaddressed | 1 | 4 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Presence of major abnormalities (classified according to European Concerted Action on Congenital Anomalies and Twins (EUROCAT)) (yes/no)

| | |
|-----------------|--|
| End point title | Presence of major abnormalities (classified according to European Concerted Action on Congenital Anomalies and Twins (EUROCAT)) (yes/no) |
|-----------------|--|

End point description:

Number of subjects who delivered fetuses/infants with abnormalities (classified according to EUROCAT) is presented. Presence of major abnormalities were based on adjudicated data, as after adjudication congenital anomalies were classified into major abnormalities or minor anomalies or in other categories. In reported data, 'Yes' infers presence of major abnormalities whereas 'No' infers no presence of major abnormalities. FASpregnant included all randomised women who were pregnant during the trial.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

At birth

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 92 | 96 | | |
| Units: Subjects | | | | |
| Yes | 8 | 8 | | |
| No | 84 | 88 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Live born infants (yes/no)

| | |
|-----------------|----------------------------|
| End point title | Live born infants (yes/no) |
|-----------------|----------------------------|

End point description:

Number of subjects with live born infants is presented. In the reported data, 'Yes' infers number of live infants whereas 'No' infers early foetal death or termination of pregnancy (induced/elective abortion). Unaddressed category refers to the cases where either the parents of the infant had not given consent to share information after delivery or the subjects who were withdrawn from trial and they did not give any further information or if the subjects did not fill the pregnancy outcome form. FASpregnant included all randomised women who were pregnant during the trial.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

At birth

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 92 | 96 | | |
| Units: Subjects | | | | |
| Yes | 86 | 85 | | |
| No | 5 | 7 | | |
| Unaddressed | 1 | 4 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of adverse events in the infant

| | |
|---|--|
| End point title | Number of adverse events in the infant |
| End point description: | |
| AE was defined as any unfavorable and unintended sign (including an abnormal laboratory finding), symptom or disease temporally associated with the use of a product, whether or not considered related to the product. AEs in foetus/infant with particular focus on the AEs from delivery to follow-up are presented. | |
| End point type | Secondary |
| End point timeframe: | |
| From delivery to final follow-up | |

| End point values | IDeg | IDet | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 91 | 94 | | |
| Units: Events | | | | |
| number (not applicable) | 164 | 150 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Neonatal hypoglycaemic episodes defined as plasma glucose \leq 1.7 mmol/L (31 Milligrams per decilitre (mg/dL)) during the first 24 hours after birth or \leq 2.5 mmol/L (45 mg/dL) between 24 hours and 48 hours after birth (yes/no)

| | |
|-----------------|--|
| End point title | Neonatal hypoglycaemic episodes defined as plasma glucose \leq 1.7 mmol/L (31 Milligrams per decilitre (mg/dL)) during the first 24 hours after birth or \leq 2.5 mmol/L (45 mg/dL) between 24 hours and 48 hours after birth (yes/no) |
|-----------------|--|

End point description:

Number of infants with neonatal hypoglycaemic episodes during the first 24 hours and between 24 hours and 48 hours after birth is presented. If plasma glucose was ≤ 1.7 mmol/L (31 mg/dL) during the first 24 hours and ≤ 2.5 mmol/L (45 mg/dL) between 24 hours and 48 hours after birth, it was called as neonatal hypoglycaemic episode. In the reported data, 'Yes' infers number of infants with neonatal hypoglycaemic episodes whereas 'No' infers number of infants with no neonatal hypoglycaemic episodes. Unaddressed category refers to the cases where either the parents of the infant had not given consent to share information after delivery or the subjects who were withdrawn from trial and they did not give any further information or if the subjects did not fill the pregnancy outcome form. FASpregnant included all randomised women who were pregnant during the trial. In the report data, Number of Subjects Analysed = number of subjects who contributed to the analysis.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

During the first 24 hours after birth or between 24 hours and 48 hours after birth

| End point values | IDeg | IDet | | |
|---|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 86 | 85 | | |
| Units: Subjects | | | | |
| First 24 hours after birth: Yes | 20 | 19 | | |
| First 24 hours after birth: No | 64 | 65 | | |
| First 24 hours after birth: Unaddressed | 2 | 1 | | |
| 24 - 48 hours after birth: Yes | 4 | 5 | | |
| 24 - 48 hours after birth: No | 77 | 78 | | |
| 24 - 48 hours after birth: Unaddressed | 5 | 2 | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From the first day of study drug administration until final follow-up (maximum 25 months)

Adverse event reporting additional description:

All adverse events are TEAEs. A TEAE is defined as event that has onset date on or after the first day of exposure to randomised treatment and no later than 7 days after the last day of randomized treatment. SAS all included all randomised women exposed to at least one dose of trial product.

| | |
|-----------------|------------|
| Assessment type | Systematic |
|-----------------|------------|

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|----|
| Dictionary version | 23 |
|--------------------|----|

Reporting groups

| | |
|-----------------------|------|
| Reporting group title | IDet |
|-----------------------|------|

Reporting group description:

Individually adjusted IDet injected subcutaneously as basal insulin once daily or twice daily + individually adjusted IAsp injected subcutaneously as bolus insulin 2-4 times daily with meals from randomization (gestational week 8-13 + 6 days) and continued until 28 days after delivery. If a subject was not pregnant at randomization, treatment was given up to a maximum of 53 weeks. For subjects who became pregnant, randomized treatment was continued throughout the pregnancy until end of treatment 28 days after delivery. Subjects who were not pregnant at 53 weeks after randomization were withdrawn.

| | |
|-----------------------|------|
| Reporting group title | IDeg |
|-----------------------|------|

Reporting group description:

Individually adjusted IDeg injected subcutaneously as basal insulin once daily + individually adjusted IAsp injected subcutaneously as bolus insulin 2-4 times daily with meals from randomization (gestational week 8-13 + 6 days) and continued until 28 days after delivery. If a subject was not pregnant at randomization, treatment was given up to a maximum of 53 weeks. For subjects who became pregnant, randomized treatment was continued throughout the pregnancy until end of treatment 28 days after delivery. Subjects who were not pregnant at 53 weeks after randomization were withdrawn.

| Serious adverse events | IDet | IDeg | |
|---|-------------------|-------------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 38 / 112 (33.93%) | 41 / 110 (37.27%) | |
| number of deaths (all causes) | 0 | 0 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | |
| Uterine leiomyoma | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vascular disorders | | | |
| Hypertension | | | |

| | | | |
|--|-----------------|-----------------|--|
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Thrombophlebitis | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Surgical and medical procedures | | | |
| Diabetes mellitus management | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Maternal therapy to enhance foetal lung maturity | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pregnancy, puerperium and perinatal conditions | | | |
| Abortion missed | | | |
| subjects affected / exposed | 2 / 112 (1.79%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Abortion spontaneous | | | |
| subjects affected / exposed | 2 / 112 (1.79%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Abortion threatened | | | |
| subjects affected / exposed | 2 / 112 (1.79%) | 3 / 110 (2.73%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 3 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Anembryonic gestation | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

| | | | |
|---|-----------------|-----------------|--|
| Cervical incompetence | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Eclampsia | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Foetal hypokinesia | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gestational hypertension | | | |
| subjects affected / exposed | 6 / 112 (5.36%) | 3 / 110 (2.73%) | |
| occurrences causally related to treatment / all | 0 / 6 | 0 / 3 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gestational oedema | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| HELLP syndrome | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 3 / 110 (2.73%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 3 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Haemorrhage in pregnancy | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Placental insufficiency | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Polyhydramnios | | | |

| | | | |
|---|-----------------|-----------------|--|
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Postpartum haemorrhage | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pre-eclampsia | | | |
| subjects affected / exposed | 2 / 112 (1.79%) | 6 / 110 (5.45%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 6 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Premature rupture of membranes | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Premature separation of placenta | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Preterm premature rupture of membranes | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Threatened labour | | | |
| subjects affected / exposed | 4 / 112 (3.57%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 5 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Uterine contractions abnormal | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Uterine hypotonus | | | |

| | | | |
|---|-----------------|-----------------|--|
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| General disorders and administration site conditions | | | |
| Injection site hypersensitivity | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Reproductive system and breast disorders | | | |
| Pelvic pain | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Shortened cervix | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Uterine haematoma | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vaginal haemorrhage | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Investigations | | | |
| Blood glucose increased | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Blood ketone body increased | | | |

| | | | |
|---|-----------------|-----------------|--|
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Medical observation | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Injury, poisoning and procedural complications | | | |
| Accidental overdose | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Fall | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Fibula fracture | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Medication error | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Postoperative wound complication | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Tibia fracture | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Nervous system disorders | | | |

| | | | |
|---|-----------------|-----------------|--|
| Dizziness postural | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Headache | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hypoglycaemic unconsciousness | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Sciatica | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Blood and lymphatic system disorders | | | |
| Anaemia of pregnancy | | | |
| subjects affected / exposed | 2 / 112 (1.79%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Eye disorders | | | |
| Diabetic retinal oedema | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Macular oedema | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |

| | | | |
|--|-----------------|-----------------|--|
| subjects affected / exposed | 0 / 112 (0.00%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Diarrhoea | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vomiting | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hepatobiliary disorders | | | |
| Cholestasis of pregnancy | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Musculoskeletal and connective tissue disorders | | | |
| Back pain | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Infections and infestations | | | |
| Bacterial vaginosis | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gastroenteritis | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pyelonephritis | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

| | | | |
|---|-----------------|-----------------|--|
| Urinary tract infection | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Metabolism and nutrition disorders | | | |
| Diabetes mellitus inadequate control | | | |
| subjects affected / exposed | 2 / 112 (1.79%) | 2 / 110 (1.82%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Diabetic metabolic decompensation | | | |
| subjects affected / exposed | 1 / 112 (0.89%) | 0 / 110 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hypoglycaemia | | | |
| subjects affected / exposed | 6 / 112 (5.36%) | 4 / 110 (3.64%) | |
| occurrences causally related to treatment / all | 0 / 7 | 0 / 7 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hyponatraemia | | | |
| subjects affected / exposed | 0 / 112 (0.00%) | 1 / 110 (0.91%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

Frequency threshold for reporting non-serious adverse events: 5 %

| Non-serious adverse events | IDet | IDeg | |
|---|-------------------|-------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 61 / 112 (54.46%) | 76 / 110 (69.09%) | |
| Nervous system disorders | | | |
| Headache | | | |
| subjects affected / exposed | 10 / 112 (8.93%) | 8 / 110 (7.27%) | |
| occurrences (all) | 16 | 18 | |
| Pregnancy, puerperium and perinatal conditions | | | |
| Placental insufficiency | | | |
| subjects affected / exposed | 5 / 112 (4.46%) | 7 / 110 (6.36%) | |
| occurrences (all) | 5 | 7 | |

| | | | |
|--|-------------------------|-------------------------|--|
| Polyhydramnios subjects affected / exposed occurrences (all) | 8 / 112 (7.14%) 8 | 6 / 110 (5.45%) 6 | |
| Pre-eclampsia subjects affected / exposed occurrences (all) | 6 / 112 (5.36%) 7 | 4 / 110 (3.64%) 4 | |
| Blood and lymphatic system disorders Anaemia subjects affected / exposed occurrences (all) | 16 / 112 (14.29%) 16 | 22 / 110 (20.00%) 22 | |
| General disorders and administration site conditions Oedema peripheral subjects affected / exposed occurrences (all) | 1 / 112 (0.89%) 1 | 8 / 110 (7.27%) 9 | |
| Gastrointestinal disorders Abdominal pain subjects affected / exposed occurrences (all) | 1 / 112 (0.89%) 1 | 6 / 110 (5.45%) 9 | |
| Abdominal pain upper subjects affected / exposed occurrences (all) | 6 / 112 (5.36%) 8 | 2 / 110 (1.82%) 2 | |
| Diarrhoea subjects affected / exposed occurrences (all) | 1 / 112 (0.89%) 1 | 8 / 110 (7.27%) 9 | |
| Nausea subjects affected / exposed occurrences (all) | 7 / 112 (6.25%) 10 | 7 / 110 (6.36%) 7 | |
| Vomiting subjects affected / exposed occurrences (all) | 6 / 112 (5.36%) 8 | 8 / 110 (7.27%) 8 | |
| Reproductive system and breast disorders Vaginal haemorrhage subjects affected / exposed occurrences (all) | 5 / 112 (4.46%) 5 | 7 / 110 (6.36%) 12 | |
| Respiratory, thoracic and mediastinal disorders | | | |

| | | | |
|--|-------------------------|-------------------------|--|
| Oropharyngeal pain subjects affected / exposed occurrences (all) | 7 / 112 (6.25%) 10 | 5 / 110 (4.55%) 5 | |
| Renal and urinary disorders Proteinuria subjects affected / exposed occurrences (all) | 4 / 112 (3.57%) 4 | 6 / 110 (5.45%) 7 | |
| Infections and infestations Influenza subjects affected / exposed occurrences (all) | 7 / 112 (6.25%) 10 | 5 / 110 (4.55%) 6 | |
| Nasopharyngitis subjects affected / exposed occurrences (all) | 23 / 112 (20.54%) 45 | 21 / 110 (19.09%) 30 | |
| Pharyngitis subjects affected / exposed occurrences (all) | 2 / 112 (1.79%) 2 | 7 / 110 (6.36%) 7 | |
| Sinusitis subjects affected / exposed occurrences (all) | 6 / 112 (5.36%) 6 | 2 / 110 (1.82%) 2 | |
| Urinary tract infection subjects affected / exposed occurrences (all) | 9 / 112 (8.04%) 11 | 11 / 110 (10.00%) 16 | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|------------------|---|
| 27 February 2018 | Discontinuation of the glycaemic data collection system (i.e. the combined use of a blood glucose (BG)-meter and eDiary). Instead a paper diary solution was implemented. |
| 30 April 2019 | Reduction in sample size |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported